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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,626	06/26/2006	Kazuhiro Niwano	292367US2PCT	8461
22850 7590 11/13/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER ABDALLA, KHALID M				
ART UNIT 2475		PAPER NUMBER		
NOTIFICATION DATE 11/13/2009		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
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### Office Action Summary

**Application No.**

10/584,626

**Applicant(s)**

KAZUHIITO NIWANA

**Examiner**

KHALID ABDALLA

**Art Unit**

2475

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/55/02)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ofuji et al (US 20030142658 A1) in view of Ohkubo et al (US 20020181437 A1).

Regarding Claim 1 Ofuji et al disclose a communication method having a variable modulation (the adaptive modulation and demodulation and error correction, based on adaptive radio link control, the multi value number of data modulation, spreading factor, the multi code multiplex number, and the coding factor of error correction are switched over according to the propagation environment of a user, in order to conduct high speed data transmission efficiently see [0007] lines 9-15) method comprising:  
a requesting step of transmitting a signal requesting data transmission from a mobile station (Fig. 1 shows a plurality of mobile stations 3) to a base station (Fig. 1 shows base station 2) when there is data to be transmitted from the mobile station to the base station (The mobile station 3 obtains the transmission path situation by measuring the reception quality or obtaining the transmission rate, and transmits the transmission path situation to the base station 2 in an up control channel see [0057] lines 7-10) also (the radio unit 8 receives the control signal and the packet directed to the terminal device from the mobile station 3 via the antenna 9, conducts A-D conversion on them, and

provides the baseband processing unit 7 with them. The radio unit 8 notifies the priority calculation unit 43 of the number of mobile stations connected to the radio unit 8 formed transmission paths see [0040] lines 9-18 and Fig. 2),

a notifying step of transmitting a signal notifying the data transmission from the mobile station to the base station (Upon acquiring the packet, the network interface unit 5 notifies the time control unit 42 of data for identifying the packet (hereafter referred to as "packet identification data"). Furthermore, the network interface unit 5 takes out a packet transmitted to the terminal device by the mobile station 3 and received by the radio unit 8, from the transmission buffer 6, and transmits the packet to the terminal device via the network 10 according to control of the control device 4 see [0036] lines 6-13) when receiving the signal requesting data transmission (each of the transmission path situation priority calculation units 432a and 432b acquires the transmission path information from the signal processing unit 41. The mobile station 3 obtains the transmission path situation by measuring the reception quality or obtaining the transmission rate, and transmits the transmission path situation to the base station 2 in an up control channel see [0057] lines 4-10), a data transmission step of transmitting the data to be transmitted from the mobile station (Fig. 1 shows a plurality of mobile stations 3) to the base station (Fig. 1 shows base station 2) when receiving the signal notifying the data transmission (The mobile station 3 estimates the transmission path situation (S107). The mobile station 3 transmits the estimated transmission path situation to the base station 2 on an up control channel as a control signal containing transmission path information to effect feedback (S108) see [0168] lines 11-14); and

a retransmission notifying step of transmitting a signal representing whether the transmitted data is to be retransmitted or not (A control channel in an up direction is set between the mobile station 3 and the base station 2. The mobile station 3 transmits the control signal to the base station 2 on the control channel. The ACK/NACK information means information concerning a result of reception of the packet in the mobile station 3, and including an ACK (Acknowledge) response, which indicates that reception of the packet has been successful, and a NACK (Negative Acknowledge) response, which indicates that the reception of the packet has failed and retransmission of the packet is requested see [0039] lines 7-17) .

Although Ofuji et al disclose wherein when the signal representing an instruction to retransmit the data is transmitted (A control channel in an up direction is set between the mobile station 3 and the base station 2. The mobile station 3 transmits the control signal to the base station 2 on the control channel. The ACK/NACK information means information concerning a result of reception of the packet in the mobile station 3, and including an ACK (Acknowledge) response, which indicates that reception of the packet has been successful, and a NACK (Negative Acknowledge) response, which indicates that the reception of the packet has failed and retransmission of the packet is requested see [0039] lines 7-17) . but does not explicitly disclose wherein when the signal representing an instruction to retransmit the data is transmitted the data is retransmitted from the mobile station to the base station with a same modulation method as one used for the data transmission .Ohkubo et al from the same or similar field of endeavor teach wherein when the signal representing an instruction to retransmit the data is transmitted

the data is retransmitted from the mobile station to the base station (Then the data link transmission control unit 203 controls the packet copying unit 206 so as to output the packet to the transmitter/receiver 207 as it is, thereby transmitting the packet to the mobile station 231 (S303). The mobile station 231 performs an error detection process of the received packet (S304). When no error is detected, the mobile station 231 notifies the base station 202 of an acknowledgment of arrival of the packet (S305 and S306). When an error is detected, the mobile station 231 notifies the base station 202 of a repeat request for retransmission of the packet (S305 and S307). When the notification from the mobile station 231 is an acknowledgment of arrival, the base station 202 deletes the stored packet corresponding to the unique number (S308 and S310) see [0189] lines 8-21) with a same modulation method as one used for the data transmission (at the mobile station 1131, the transmitter/receiver 33 receives and demodulates the signal through the mobile station antenna 32 and feeds the packet obtained by the demodulation to the data link transmission control unit 1034. The data link transmission control unit 1034 performs the data link transmission control comprising the automatic repeat request control and also performs the error detection using the CRC code added to the packet, for the input packet (S44). When the detection results in finding an error in the packet, the data link transmission control unit 1034 identifies the number of the packet for a repeat request and the base station 1102 as the control base station, based on the identification information added, and then transmits a NACK signal to the base station 1102 on the basis of the result of the identification (S45) see [0298] lines 1-15). Thus it would have been obvious to one of ordinary skill in the art to implement the

method of Ohkubo et al in the system of Ofuji et al .The method of Ofuji et al can be implemented on any type of method wherein when the signal representing an instruction to retransmit the data is transmitted the data is retransmitted from the mobile station to the base station which is taught by Ohkubo et al with a motivation in order to an efficient data link transmission control .

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(US 20020093976 A1), (Razoumov et al) discloses Method and apparatus for scheduling packet data transmissions in a wireless communication system.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHALID ABDALLA whose telephone number is (571)270-7526. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dang Ton can be reached on 571-272-3171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. A./

Examiner, Art Unit 2475

/DANG T TON/

Supervisory Patent Examiner, Art Unit 2475/D. T. T./

Supervisory Patent Examiner, Art Unit 2475